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SMART PANEL BASIC CONFIGURATION

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1. SMART PANEL EQUIPMENT

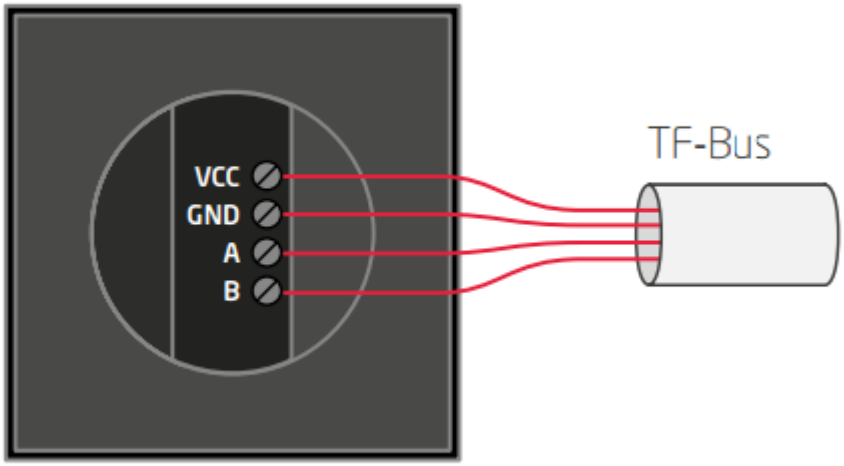
1. Smart Panel consist of:
    a. OLED screen
    b. 4 touch buttons
    c. Gesture sensor recognizing 4 gestures
    d. Approach / presence sensor
    e. Temperature sensor
    f. Light intensity sensor

2. CONNECTING CLU WITH SMART PANEL

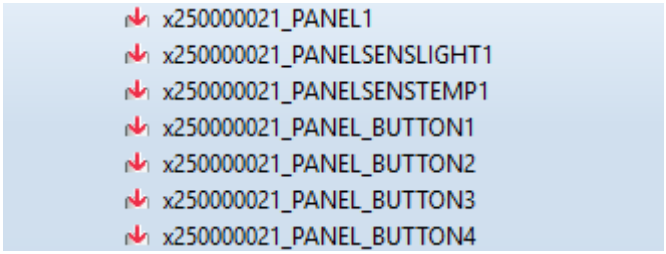
1. To connect the panel to modules configuration, connect the last module with ARK connector. Connect the panel with a screen to the ARK connector by means of twisted pair, accordingly to the below description:
    a. Connect the pair of two twisted cables to the V_{cc} clamp

b. Connect the second pair of two cables to GND clamp

c. Connect each cable of the third pair to A and B clamps



2. Connect free cable ends in the same way to ARK connector
3. Open Object Manager configurating software
4. Create a new project and execute CLU Discovery or Open the already existing project and communicate with CLU
5. Make sure that the following elements are on the module list:



6. If it is the case, proceed to creating configuration, otherwise contact with the Support department

3. HELPFUL CONFIGURATION INFORMATION

1. Configuration via a panel with screen differs from classic Grenton touch panel. The differences include, for example, apart from the features, methods and events of each button and temperature and light intensity sensors, also new features, methods and events for Panel itself have been added – supporting the screen and gestures sensor.
2. The screen equipped in touch panel has the resolution of 128x64 px

3. The panel can function in two modes: displaying the icons (the screen is divided into 4 fields) or in drawing mode, using the whole screen field.
4. The touch panel is equipped with a micro SD card slot, which serves for storing default icons displayed on the panel. The files should be placed in the main catalogue with .bmp extension[1]

4. CONFIGURATING BUTTONS AND DISPLAY

1. By double-clicking, open the object PANEL_BUTTON on the module list (where X is one of four buttons)
2. Go to the Events tab
3. To configure the action of buttons, assign methods to the specified events by clicking  at the right side of the window (it works in the same way as in the classic Grenton panel)
4. The screen's field of a given button is described by 3 features (to display them, go to Features tab):
    a. *label* – the feature defining text assigned to a given button
    b. *ICON_A* - the feature defining the name of an icon assigned to a given button, when the panel is in monostable mode, or for a bistable mode for feature value = 0
    c. *ICON_B* – the feature defining the name of icon assigned to a given button, when the panel is in the bistable mode for feature value = 1. If you want to assign the same icon, but of reverse colour, type the same name, preceding it with "~" (for example "~icon5")
5. The above features can be set in Features tab or by using methods (available in Methods tab) *SetLabel, SetIconA, SetIconB*

   ATTENTION! *SetIcon* method have a higher priority than the *SetLabel* method
6. Send the configuration to CLU

5. CONFIGURATING GESTURE SENSOR

1. Open the Panel object by double-clicking
2. Go to the Events tab
3. Assign the methods to the events *OnUp, OnDown, OnLeft, OnRight,* by clicking  at the right side of each method
4. It is possible to replace the icons displayed by default by invoking gestures – go to features tab and type the names of required icons without extension. To enable the use of icons, they must be uploaded to microSD card with .bmp extension.

[1] The full icon and microSD card mounting instructions, you will find in product card at: http://www.grenton.com/upload/files/PL/GRENTON_SMART_PANEL_TF-Bus.pdf

5. Close the window by clicking OK
6. Send the configuration to CLU

6. CONFIGURATING PROXIMITY SENSOR

1. Open the Panel Object by double-clicking
2. Open Features tab
3. The approach sensor is described by 3 features:
    a. *ProximitySens* – defining sensitivity of proximity sensor
    b. *ProximityTimeout* – defining time, after which the display will be dimmed if any movement would not be detected
    c. *ProximityValue* - returning the approximate distance in centimetres from panel to the object[2]
4. The above features can also be set by means of methods *SetProximitySens* and *SetProximityTimeout* (visible in Methods tab in Panel object)
5. When the approach sensor reacts, the *OnProximityDetect* event is generated (visible in Events tab in Panel object). Additional events can be attached to it.
6. Send the configuration to CLU

[2] The accuracy of the measurement depends on the lighting conditions and the color of the approaching object